



**Lakeview  
Rock  
Products, Inc.**

MC350020 Incoming  
cc: Leslie  
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TaskID# 2553

July 30, 2008

Susan White  
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STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES  
Division of Oil Gas and Mining  
1594 West North Temple, Suite 1210  
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RE: *Lakeview Rock Products, Inc.*  
*Order to Revise*

Dear Susan:

We have carefully reviewed your May 12, 2008 Order to Revise along with the applicable Administrative Code Rules ("Rules") that apply to Large Mining Operations. We have, in accordance with the Rules, submitted information as required by the Division. We have also provided to you responses to certain requests that appear to exceed the authority of the Division and which are not governed by the Rules.

We will address each section of your Order to Revise as set forth in the Order. The Division's March 8, 2008 Comments are in italics, which are followed by Lakeview's Responses.

## **I. VARIANCES**

First with respect to the Highwall Variance, Lakeview will, as we agreed in the 2006 Approved NOI, submit to the Division an updated engineering analysis. While we will make every effort to meet your June, 2009 deadline, it is our position that pursuant to the rules and our approved NOI we may be entitled to additional time. We will, of course, advise you of our progress with providing you with the updated analysis and advise you if additional time is required to complete the 2009 analysis.

Next, regarding the Topsoil Variance, we will provide the Division with any information necessary to obtain this variance at a later date.

## **II. NOTICE OF INTENTION**

As a preliminary matter, and as we have previously discussed with you, Lakeview is responding to what was originally the Division's comments to a June, 2007 Notice of

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Intention that was withdrawn by Lakeview just prior to the time Lakeview signed the Large Mine Reclamation Contract ("Contract") with the State of Utah<sup>1</sup>. Several of these comments apply only to the previously withdrawn June NOI, and have no applicability to the approved February 2006 NOI.

Also, we are keenly aware of the provisions of R647-4-102 of the Rules that unequivocally state the "Division may review the permit and require updated information and modifications *when warranted*." (Emphasis added). In July of 2006, after multiple exhaustive reviews by the Division over the course of months and years, and after Lakeview made multiple changes to the NOI *at the specific request of the Division*, the Division granted to Lakeview tentative approval. This approval ultimately became final in March of this year when Lakeview signed the Reclamation Contract.

Lakeview prepared the NOI, and made the many changes requested by the Division at the cost of over \$50,000, and continues to incur costs as it responds to this most recent request for information, all of which as already been thoroughly reviewed by the Division. Nearly all of the information the Division is now seeking from Lakeview relates to conditions at the site *that have not changed* since the time the Division granted to Lakeview Tentative Approval. The Division, in its May 12, 2008 Order to Revise has failed to articulate any factual or legal basis indicating that the requests set forth in its Order to Revise are warranted pursuant to R647-4-102 of the Rules.

In the spirit of good faith, however, Lakeview has provided responses to your request to the extent that is necessary and that Lakeview is able to provide them, and of course to the extent that they appear to be warranted under R647-4-102 of the Rules. In providing these responses we in no way intend to waive any rights to which Lakeview is entitled under the Rules or other applicable laws.

*R647-4-104 – Operator's, Surface and Mineral Ownership Provide phone numbers of adjacent surface land owners*

The only adjacent landowner other than Lakeview Rock Products (or one of its subsidiaries) is Staker-Parsons, with a telephone number of (801) 532-3537.

*R647-4-105 - Maps, Drawings & Photographs*

*General map comments:*

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<sup>1</sup> The signed Contract is associated with the February 2006 NOI that received Tentative Approval approved by the Division in 2006, and became binding on the Division in March of 2008 when Lakeview signed the Reclamation Contract (see R647-4-101 of the Rules).

*Please review each map and ensure that basic map requirements are met. Basic requirements are elements such as: title, north arrow, scale, legend, citations, etc. Major maps have been reviewed and general comments are provided under each map title, but refer to this general comment and ensure these general requirements are met. (BE)*

*Provide contour intervals in the legend. (BE)*

*None of the provided maps show with clarity access to the lower and upper mine areas from Beck St. Please provide this information on any of the map(s), but it would be most appropriate on a general information type map. (BE)*

The Attached revised maps include the above requested information.

*Show the locations of areas previously affected by mining with no reclamation liability since none are shown. (BE)*

To our knowledge there are no areas affected by mining operations of Lakeview Rock Products.

*Show the bonded area on a map. If the bonded area is equal to the property boundary area, please indicate. (BE)*

This information is shown as all of the lands affected by mining as defined and described in the 2006 NOI. It is also shown in Figure 5 of the 2006 NOI.

*Maps must show a border clearly outlining the acreage to be disturbed. For clarity it is helpful to label each map with acres, overall, and acres associated with each legend item when applicable. (BE)*

It appears that Figure 5 of the 2006 NOI clearly shows this information, including the boundary outlining the final disturbed area.

*Variance requests require maps showing the variance areas. These areas should be labeled and identified. For ease of identification, it is helpful to assign each variance request a reference number, and use it in the narrative and on the maps. This information may be repeated under Variance in this document. (BE)*

See revised Figure 4.

*Facilities Map: (BE)*

*More detail is required. It may be necessary to submit two maps because of the quantity of information on the existing map and the level of detail required. For example, the current map shows some rectangular shapes, which are assumed to be buildings, however, there is no legend identifying what they are (they need to be identified). Some of the rectangles are labeled, so they are clearly buildings, tanks, or equipment. The legend should reference every building and structure and the map should have them labeled accordingly (they are mostly complete). There appears to be several piles within the map as well but none of them are labeled either. These piles may be waste or topsoil, but currently unknown. Please ensure all elements are named, otherwise the communication success is deficient.*

Please see the updated map included with this response. Additionally, all piles are product piles and are subject to change based on customer demand and market forces.

*The elevations cannot be read. See above comment. The scale may need to be changed to incorporate all the detail required, resulting in producing and submitting two maps.*

Because this is a facilities map we are unable to show the elevations without obscuring the facilities. However, elevations and contours are clearly legible on applicable maps as well as the Facilities map on the submitted plan sheet maps.

*Make sure drainage controls structures and locations are shown and labeled.*

Drainage control is managed through channeling, and as mining work proceeds it is necessary to adjust the channels and relocate them in accordance with the changes to the terrain that is affected by mining. Drainage control is, therefore, dynamic and cannot be mapped. Please, however see the attached map for the location of retention areas. See revised Figure 3.

*Show and label solid waste management location(s)*

Please see the attached map. See revised Figure 3.

*Please label any and all equipment that is portable.*

All equipment shown on the map is portable.

*Include number of acres to be disturbed (in the legend). Also show the area to be disturbed on the map (this area may be different than the Lakeview boundary but should be the same as the bonded area).*

Because this is a facilities map there appears to us to be no nexus between the number of disturbed acres and facilities. Figure 5 of the 2006 NOI, however, clearly shows the number of disturbed acres.

*The map shows an area 'drilling and blasting area', will that area remain a drilling and blasting area? Please indicate the permanence of that area, and include number of acres*

Drilling and blasting are an integral and fundamental part of Lakeview's mining operations, and all areas to be mined are, therefore, drilling and blasting areas.

Figure 2: (BE)

*Too much information is on this map so that adjacent landowner information cannot be read. Please include a separate map with this information only.*

*Show watersheds and provide legend reference. This information can be provided on a separate map.*

Please see a revised Figure 2 attached to this response.

*Explain why there are a limited number of wells shown or show all wells. Other information that is available to the Division reveal there may be more than what is shown.*

*Show with clarity all pipelines within 500 feet of the mining operations.*

Lakeview has no other information regarding wells other than what is shown on Figure 2. If the Division has additional information that we can incorporate into Figure 2 please provide that in order for us to make the appropriate changes. Regarding the pipelines, there are no other pipelines within 500 feet of the mining operations.

*The 'small berms' are not shown on each outer bench edge.*

This is too small of a detail to map with clarity. The narrative clearly discusses and describes this requirement.

*Please label the bench widths and bench heights or provide the information in the legend.*

See legend in revised Figure 4.

*There is concern that there is not enough setback to contribute to overall stability for longevity. The 100 ft setback is a requirement for reasons other than stability. Please review this design as shown.*

We have reviewed the design and note that this information was included in the 2006 NOI and was reviewed and tentatively approved by the Division. This Division has not indicated to us specifically why this information is now warranted. We will, however, update this information in conjunction with an updated slope stability study that is due in 2009.

*Please provide more information in the narrative about the final border staircased and inner-slope chevron pit configuration: what equipment will be used to achieve this shape? How will this configuration be achieved? Please note that this comment is in the 'map' section, however, please understand that a narrative may be required.*

This information was included in the approved 2006 NOI. To further clarify this information, however, please note that we will achieve the shape through standard and ordinary mining and construction methods.

*VIEW: Typical Bench Section, June 6, 2007*

*The figure labeled "VIEW: Typical Bench Section, June 6, 2007" should include the bench face angle and inter-ramp slope angle. Three "typical" sections should be shown in this figure, one for each of the proposed inter-ramp slope angles, i.e., 60° in the limestone, 50° in the siltstone and conglomerate, and 40° in the cemented gravel. (BE*

All of the maps and information included in the June 6, 2007 NOI have, as noted above, been withdrawn. All requests for additional information should be drawn from the February 2006 NOI.

*105.1            Topographic base map, boundaries, pre-act disturbance  
Drawings or Cross Sections (slopes, roads, pads, etc.)*

*Please provide supporting watershed and drainage maps corresponding to the referenced watershed calculations. (TM)*

Please refer to Figure 2 and Section 6.1.1 of the previously approved February 2006 NOI. This information is clearly shown and described in these two documents, and the Division has not provided any information indicating that the conditions relating to watershed calculations at the mine have changed, warranting an update.

*105.3.16.1 Baseline information maps (BE)*

*Provide an existing operations map, showing the areas that have been mined, area of disturbance with acres to the date that will be shown on the map, show contours and elevations.*

*Please include boundary lines between Salt Lake City and North Salt Lake, include county boundary lines as well.*

Please see the map attached to this response.

*A geology map is required that identifies faults (strikes and dips), rock types, interbeds, and predominant joint (bedding and cross joints) orientations to help demonstrate generally stable pit wall configurations. The current and future disturbance areas should be superimposed on the map.*

The Division has already reviewed and approved the February, 2006 NOI which contains very detailed information in section 4.8 of the NOI and in the IGES report. The Division has not provided Lakeview with any specific reason why the conditions at the mine have changed to the extent that the Division needs additional information. This notwithstanding, Lakeview will provide sufficient and detailed information in conjunction with its submission of an updated slope stability report in 2009. We have, however, supplied for you a general geological map from the Utah Geological Survey with this submission.

*R647-4-106 - Operation Plan*

*106.2 Type of operations conducted, mining method, processing etc.*

*Describe the processing process and identify the equipment required. (BE)*

This information is clearly set forth in section 4.2 of the approved February, 2006 NOI, and is in accord with the cited Rule. Lakeview's operation has not changed since the Division's approval. We will, however, indicate here that the material is moved with tractor-dozers, trucks, and excavators.

*Indicate the bench height and width that are created when mining down from the upper most bench. For clarification, the NOI uses the verbiage, "a series of benches and highwalls remain", is the use of the word 'highwall' in the phrase mean bench height?*

*What is the maximum slope height when creating a 'series of benches and highwalls'? (BE)*

This information is clearly shown in Figures 4 and 5 of the previously approved February, 2006 NOI, with the bench widths of thirty feet and a maximum slope height of 133.98'.

*The submittal indicates that material is accessed through drilling and blasting. Typically, this mining method entails operational highwalls. If that is the case, more information is required describing the maximum height of all slopes that include highwalls and benches, the width of the benches, bench face width and maximum bench face angles. If there are highwalls, geologic explanation is required that summarizes among other pertinent concerns; their geologic orientation to maximize stability, weakness zones, and resistance to erosion. (BE)*

This information is included with the February, 2006 NOI, which was carefully reviewed and subsequently approved by the Division. It also is in complete accord with Rule R647-4-106 2, and Lakeview has made no changes to its "mining/processing" methods since the Division approved the NOI. Moreover, the Division has provided no information indicating why the above request is now warranted. We will, however, note the following: drilling and blasting is used to loosen the rock so that it can be pushed and conveyed to the processing facilities at the upper and lower crusher sites. We do not drill and blast to access an underlying seam. All material is processed into usable products. The benches are drilled and shot in the same orientation as the final bench design, and when the mining has proceeded to the far east boundary the final bench configuration will have been attained.

*There is no indication of an onsite explosives magazine or a caps magazine. Are there any blasting agents or magazines on site? If not, please provide more information about blasting. Is it contracted? (BE)*

There is a blasting magazine near the upper crusher and it shown on the updated facilities map. The blasting is a combination of self perform and contracted blasting services.

*There is no mention of fueling and/or maintenance areas in the narrative nor is any of this type of information shown on the maps. Specific information is required that describes the location of the maintenance areas and where the deleterious materials are stored. There is a fuel tank on site, and it is assumed it is located in the fueling maintenance area, however the narrative is unclear regarding its location. It just indicates it is on-site. Is the tank on a concrete pad? If so, provide its dimension including thickness. Does fuel delivery occur through out the entire year or is it seasonal? How long will empty lube oil containers be*



*on-site before they are properly disposed of? Please make a statement to the effect that all deleterious materials will be handled in accordance with state and federal requirements or indicate these requirements are met by reference to the SPCC Plan. (BE)*

There is no "mention of fueling and/or maintenance areas in the narrative" or shown on the maps because the Rule does not require it. This request seeks information about handling "deleterious materials" existing at the mine, but misapprehends just what the Rule requires. Rule R647-4-106 only requires that Lakeview provide a narrative about "any deleterious or acid forming materials present or to be left on the site *as a result of mining or mineral processing.*" (Emphasis added.) Because the Lakeview Pit is a sand and gravel mine, and because the mining uses all of the material excavated, there are, or will be, no "deleterious materials or acid forming" materials left on the site *as a result of mining.* Any other "hazardous" materials will be handled and disposed of appropriately and, of course, as required by law.

*106.3 Estimated acreages disturbed, reclaimed, annually.  
Please indicate the number of disturbed acres that occur annually. (BE)  
Indicate the number of acres that will be reclaimed annually. (BE)*

This information is thoroughly discussed in Sections 4.3 and 4.4 of the 2006 NOI that was reviewed and approved by the Division. We will also note, however, that the amount of sand and gravel to be mined and, therefore, the number of acres to be disturbed, changes from year to year because market demands change from year to year. Also, because the mining operations move sequentially and incrementally into the mountainside it is impossible to conduct reclamation until after mining operations cease.

*106.5 Existing soil types, location, amount  
Please show the locations of soil stockpiles and slope dimensions on a map.  
Please also include volume estimates for the stockpiles. (PBB)*

*Please include a map showing where the two different soil types are located.  
(PBB)*

*The plan needs to contain information about the chemical and physical nature of undisturbed soil and of material in areas that are previously disturbed. Would the materials in previously disturbed areas be suitable as growth media? (PBB)*

This information is clearly set forth in section 4.5 and 4.6 of the February, 2006 NOI that was thoroughly reviewed and previously approved by the Division. The conditions at the mine relating to topsoil have not changed. In addition, the Division has provided no information to Lakeview about why this request is warranted. We will, however, note that we have incorporated the soil into protective berms in the cut area. We have also

started stockpiling excess topsoil from our ongoing construction projects around the valley. This stockpile is shown on the revised maps attached to this response. Volume calculations are impossible to provide because as the pile growth is in a constant state of change depending the work load and availability.

Moreover, there are no undisturbed surface areas. Materials in previously disturbed areas are primarily rock and sand & gravel and were not suitable for growth media. What was salvageable has been place in berms as noted above.

*106.6 Plan for protecting & redepositing soils*

*The plan says (Section 4.6) there are approximately 12 acres of relatively undisturbed ground in the area of proposed new mining but that no topsoil will be salvaged from this area because of steep slopes, please provide additional information as to why soil cannot be salvaged. (PBB)*

*The only areas where the operator intends to use any soil are on the safety berm and to reclaim the road on the east side of the property.*

*Please include acreage figures for the berm and road. How much soil is needed to reclaim these facilities? (PBB)*

*According to the plan, the topsoil piles are vegetated with volunteer species. Are these species weeds? If so, efforts need to be made to establish desirable perennial species. (PBB)*

The February, 2006 NOI that was previously and thoroughly reviewed and approved by the Division provides over two pages of information addressing the above request. The twelve acres referred to in the NOI have remained unchanged and undisturbed since the Division approved the NOI, and the Division has provided no basis for now seeking additional information. Please refer to section 4.7 of the approved NOI.

*106.9 Location & size of ore, waste, tailings, ponds*

*Provide the maximum volume of each of the product piles. Include the dimensions as well. (BE)*

This information is clearly set forth in section 4.9 of the previously reviewed and approved NOI. As that section states, because this is a sand and gravel mine there simply are no, nor will there ever be, "ore and waste stockpiles, tailings and water storage/treatment ponds."<sup>2</sup>

*R647-4-108 - Hole Plugging Requirements*

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<sup>2</sup> Rule R647-4-106.9

*The operator has committed to follow the rules regarding drill hole plugging, but the plan does include information about drill holes. Any future drill holes need to be approved as part of the plan and the reclamation surety. (PBB)*

This information is clearly set forth in section 5.0 of the previously reviewed and approved NOI. Also note that as a practical matter all "drill holes" disappear as a part of the blasting sequence of the mining process.<sup>3</sup>

#### *R647-4-109 - Impact Assessment*

##### *General Comments*

*When addressing this section, please state the potential impacts that may occur as a result of mining operations. The NOI provides background, historical, conditional, and location information but does not indicate the impact of mining operations on the environmental factors that are described in R647-4-109. For example, in section 6.4.2, information is provided about runoff in terms of how precipitation falls on the highwall face, quantity, and some general run off behavior patterns, among other descriptions, but neglects to describe the impacts of mining operations regarding erosion. To develop this understanding further, an example: a mine operation has large disturbed land areas (impact) and erosion control is a fundamental requirement. One could then identify that because of the nature of the mine's size, erosion and increased/altered sediment loading will occur. Impact locations would be identified among and outside of the large disturbance. These locations could be: roads, piles, local topographic variability, stream, drainages, and slopes to name a few. Finally, a description of the actions that will occur to mitigate the impacts associated with these sediment loading locations should be included. The impact of mining operations because of its large disturbed area would not be the only mining related impact regarding erosion. Another impact could be how the pit configuration creates erosion risks because of steep slopes in consolidated and unconsolidated materials. Again, once the environmental concern related to mining operations is identified, then mitigation measures, plans, and controls are developed via narrative, drawings and maps. The Division suggests using this approach with each of the environmental events in R647-4-109. (BE)*

*109.4 Slope stability, erosion control, air quality (fugitive dust control plan), public health & safety, surface and groundwater, threatened and endangered species, soil resources Surface and groundwater*

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<sup>3</sup> As is typical with sand and gravel operations such as Lakeview's, the only holes drilled are those used for blasting.

*Lime Canyon Springs is used for dust suppression etc. as referenced on page 17 of the plan. Please state how the water gets to the property and is distributed. Please describe the potential impact the three springs will have on surface water or groundwater, flowing over or out of the pit slopes and/or highwalls. (TM)*

Section 6.1 of the February, 2006 NOI previously reviewed and approved by the Division provides nearly three pages of narrative and information about water and water resources, and we refer you to that section. In addition, the water is piped to storage tanks on site, and once in the tank it is loaded into a water truck and distributed throughout the site. The water cannot fall over pit slopes or highwalls.

*Erosion control*

*Please provide the watershed calculations and the necessary documentation to support the statements within the impacts section that no attempts are needed to route water through, around, or within the property. If water ponds in the eastern portion of the property, please show that area on the appropriate operational map and how the water arrives in that area in a controlled manner. Concerns regarding the stability of the highwalls due to erosion are and continue to be a concern, please provide the necessary documentation to show this is not a significant problem with highwall stability. (TM)*

This information is clearly set forth in section 6.1.1 of the February, 2006 NOI previously reviewed and approved by the Division. There are, however, water ponds on the eastern area of the property that are shown on the revised map. Please keep in mind that this site has been operating for over thirty years, and highwalls have historically been stable over the course of this time.

*Operationally, while various areas are being developed what methods are implemented to minimize erosion and provide adequate drainage? (BE)*

This information is clearly set forth in section 6.1 of the February, 2006 NOI previously reviewed and approved by the Division.

*Include the storm water pollution plan. (BE)*

Until recently this site was exempt from SWPPP permit requirements. The State of Utah Department of Environmental Quality is now, however, requiring SWPP permits and plans for this site. Lakeview is currently developing such a plan and will submit a copy to the Division once it is finalized and filed.

*Provide information about how runoff is managed in the facilities area. (BE)*

This information is clearly set forth in section 6.1 of the February, 2006 NOI previously reviewed and approved by the Division.

*What methods are used to maintain pit roads and access roads to minimize erosion and runoff? No blocking or restrictions that impede drainage or adversely affects the road(s) should occur please provide verbiage containing this information. What is the grade of the haul roads? If they vary, provide details such as the maximum grade and distance as well as the minimum grade. (BE)*

Again, the February 2006 NOI contains the information required by the Rules. Please note, however, that drainage on pit roads and access roads is channeled to on-site basins which either infiltrate or evaporate. The roads are private and will be maintained in such a fashion as to facilitate operations. Drainage is sufficiently controlled. These basins are also cleaned as necessary. The access road to the upper crusher is paved in asphalt and has a gradient of 7%. Access to the lower crusher is flat.

#### *Public Health and Safety*

*Section 6.4.6 does not provide information about the proximity of the mine in an urban area (i.e. access routes, noise, vibrations, ect.); slope stability should be addressed from this perspective as well. (BE)*

There is no section 6.4.6 in the February, 2006 NOI. In response to this request, however, please note that the nearest home will be over 600' from any mining activity. Seismic monitoring inside our property line during blasting operations shows vibrations less than 2"/sec. We will not permit home building on our slopes.

*Section 6.4.4 indicates that detritus will be properly disposed of within one year of cessation of mining operations. Detritus must be managed on an ongoing basis during active mining operations. Please commit to this or alternatively request a variance (R647-4-107.1.12). (BE)*

Section 6.4.4 of the February, 2006 NOI was previously reviewed and approved by the Division. Lakeview states, however, that trash, scrap metal, and wood are disposed of on an ongoing basis during operations out of necessity for the efficient management of the site. Buildings will not be removed until mining is ceased.

*Section 6.4.4 addresses public safety concerns and outlines some actions that will be implemented. One specifically identified action that the draft mentions is entrance gates will be locked at all access points. On a previous inspection it was discovered that this is not the case on the upper access point. To avoid*

*citations, ensure the onsite actions are consistent with the plan verbiage. Please elaborate regarding the actions that will occur regarding highwall safety. The draft plan information is not consistent with what measures are taken at the site, or elaboration is required for clarity reasons. The upper highwall areas do have signs in place, however, the plan does not mention this action. In addition, the plan indicates there is a fence on the east property line. This fence has never been seen during inspection. Please be certain it is in place as outlined in the plan. For determination of existing conditions, please provide a map that shows the placement of all public safety actions. (BE)*

This comment fails to acknowledge that Lakeview's safety measures are in complete accord with the previously reviewed and approved NOI. Moreover, access points not used for commercial business are in place and will be locked at all times when there is no activity in the area accessed by the gate. The fence is in place in accordance with the plan and is clearly shown and referenced in the legend on Figure 5.

#### *Air Quality*

*Section 6.4.6 indicates an Approval Order has been granted. Provide a copy of the Air Quality Approval Order as an appendix to the plan including the dust control plan. More narrative is required about developing pit roads and how dust control is managed during that effort. Include the distance of the nearest current mine road locations to the pit boundary (in all directions). If this information is in the dust control plan, please indicate. If there are specific emissions requirements for any equipment, please provide a list of that equipment. (BE)*

As noted above, there is no section 6.4.6 in the February, 2006 NOI. Lakeview does, however, have an Approval Order from the Division of Air Quality and is subject to that Division's monitoring and regulation.

#### *Slope Stability*

*If a mined area exists, but is not currently being worked, what measures are implemented to ensure it is environmentally stable? Is there a monitoring program in place to ensure slope stability regarding current slopes? (BE)*

*Outline the projected impacts to slope stability and what actions are implemented to mitigate the impacts. Please include in the narrative that the pit will be managed according to MSHA safety guidelines and the mining and reclamation plan. Also include information that supervisors or appropriate designated personnel will regularly monitor the slopes and benches. This information requested is not all-inclusive, as there are other important details that are*

*required; specifically pertaining to the site geology, groundwater, and faulting.  
(BE)*

Section 6.4.1 of the previously reviewed and approved February, 2006 NOI discusses slope stability. In response to this request, however, we note that the entire site is currently active and the highwalls are constantly monitored for loose rocks<sup>4</sup> and the loose rocks are removed in areas where people and equipment may be harmed. Lakeview also has a current MSHA mine permit and the site and pit operations are conducted in full compliance with all MSHA guidelines.

#### *Slope Stability Report IGES*

*Section 6.4.1, The fact that Lakeview Rock Products, Inc (or their predecessor) contracted with IGES to conduct this slope stability study is commendable, however, a number of potential problems with the IGES analyses, conclusions, and recommendations have been identified. Note the title of the October 7, 2004 IGES report includes the phrase "Preliminary Engineering Analyses." Other phrases used in this report including "preliminary analysis," "present level of data," "significant data gaps," "lack of substantive data," and "limited quantitative basis" indicate the general lack of comfort IGES had with the input parameters necessary to perform these stability analyses.*

*The IGES report does not contain a plan map of the proposed final pit design which was analyzed in this stability investigation. Unfortunately, without a plan map of the proposed pit, it is not possible to ascertain whether the current pit design resembles the pit wall analyzed by IGES in 2004.*

*Although the IGES report does not contain a geologic map of (i.e., a geologic projection to) the proposed pit, the sections on pages 4 to 9 illustrate the simplified geology that IGES modeled.*

*Based on descriptions in the Oct-04 IGES and Jun-07 JBR reports, the cross section shown on page 9 (IGES, Oct-04) is thought to represent the recommended final pit design configuration. The proposed slope is a compound slope with a 60° lower segment, 50° mid-section and 40° upper segment. The proposed cut slope height is 900-ft. The lowermost 450-ft section is composed of limestone at 60°. Above the limestone is a 200ft high section of siltstone at 50°. The siltstone is overlain by 75-ft of conglomerate at 50° which is capped by 17-5ft of cemented gravel excavated at 40°. Please provide clarification by indicating if the cross section represents final design configuration (BE)*

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<sup>4</sup> This is also a requirement of the MSHA and its rules.

The IGES report and the accompanying narrative that were submitted to the Division as a part of the February, 2006 NOI received an exhaustive review by the Division and were revised pursuant to directives from the Division. The Division did not raise the above objections to the study at that time and, in addition, the Slope Stability Study will be updated and revised in 2009 as described above.

#### *R647-4-110 - Reclamation Plan*

##### *110.1 Current & post mining land use*

*According to a May 10, 2006, letter from Salt Lake City Corporation, the maps in the reclamation plan depict an excavation limit line that does not match the current zoning on the property of the proposed excavation limit line that Lakeview and the City have discussed. The Division understands the current open space zoning is 497 feet west of Lakeview's eastern property line, but the figures in the plan show the excavation limit closer than this. Please modify the plan so the excavation limits conform with current zoning requirements. (PBB)*

Rule R647-4-110 refers to land use, not zoning. There is a distinction recognized by law that applies to this site which is that Lakeview had a legal nonconforming use on this property. It has always been, and will continue to be, Lakeview's the position that it has a legal nonconforming use on this property, and the May 10, 2006 letter to which the Division refers ignores this position and this right to use the property for mining. Because Lakeview has a legal nonconforming right to mine this property the current zoning is effectively inapplicable.

##### *110.2 Roads, highwalls, slopes, drainages, pits, etc., reclaimed*

*Please ensure cross sections in Figure 4 accurately represent the indicator lines. More information is needed, including tick marks on the x-axis and identifying each boundary line (purple). (BE)*

*The plan describes only the reclamation on the 'highwall' benches, but there is no highwall variance that has been granted by the Division. Until a variance is granted, the plan must show reclamation with final slopes at 45° and include a description of how it will be achieved. The current map that shows highwalls (figure 5) would be submitted with the variance request to assist its evaluation. (BE)*

*Provide more information about the preparation of the pit floor for seeding. (BE)*

Again, this information has been provided in the previously approved and exhaustively reviewed February, 2006 NOI, including Figure 4. Moreover, section 6.4.1 of the approved NOI allows for the 60/50/40 compound slope as shown on the reclamation



plan. It further states that slopes may need to be revised in the future depending on future slope stability studies. The reclamation plan as drawn is correct for the plan that is in effect.

*110.3 Description of facilities to be left (post mining use)*

*Please indicate any utility lines that may be left, or if they are removed in entirety, state that. (BE)*

*110.5 Revegetation planting program*

*The operator proposes to sample 10 representative areas of the pit floor for factors to determine the floor's ability to support growth. Depending on the results of these tests, amendments to the plan will be made to provide an acceptable growth medium. No topsoil will be stockpiled for use in reclamation of the pit floor.*

*Before evaluating this plan, the Division will await the response to comments under rules R647-4-106.5 and -106.6. (PBB)*

*Please see comments under rule R647-4-112 concerning the plan to seed the highwall benches just once. (PBB)*

*On page 27, the plan says manure would be applied to certain areas at the rate of five tons (dry) per acre. The Division discourages the use of manure, especially where salvaged soil is available, because this practice tends to increase weed growth. Manure may be appropriate for use on the pit floor if no topsoil or growth medium is available. (PBB)*

*110.5.1*

*Please describe procedures to stabilize the slopes, pit floor, and upper areas. (BE)*

*110.5.12*

*This comment may be repetitive from the Impact assessment portion of the review:*

*If a mined area exists, but is not currently being worked, what measures are implemented to ensure the minimization of erosion and siltation? (BE)*

All of the above information is included in the previously approved and exhaustively reviewed February, 2006 NOI, or is otherwise not required by the Rules.

*For each of the variances requested under R647-4-112, reference the particular rule for which variance is requested, provide a description of the area affected by the variance - supported with a map showing the area(s) affected, justify the variance, and provide a description of the methods or measures which will be implemented in lieu of the standard practice described in the rule. (BE)*

*Some of the comments outlined below define the concerns about each of the above mentioned practices and a variance request may be required:*

*The preliminary slope stability study is inadequate. A variance will not be granted until further studies are performed. The Division can provide specific information in order to move forward and have the appropriate work performed. Please contact the lead, Beth Ericksen for information about the inadequacies of this report. (BE)*

*Please provide further information about how soils could potentially be transported to the pit floor. What route would need to be taken to get the soils to the pit floor? How far is it and at what kind of slope? As discussed under R647-4-106.5 and -106.6, the Division needs further information about how much soil is available. If there is only enough soil for distribution in the upper areas, the variance request may be more justifiable. (PBB)*

*The operator requests a variance from revegetation success standards for the highwall benches because they would be impractical to meet and impossible to measure. There is not a highwall variance for this mine, so the revegetation of the highwalls cannot be outlined until the variance is issued. The revegetation plan should include planting 45° slopes.*

*The rules include two revegetation success standards. Rule R647-4-111.13.11 requires that the revegetation has achieve 70 percent of the premining vegetative ground cover, but R647-4-111-13.12 says revegetation shall be considered accomplished when the Division determines that revegetation has been accomplished within practical limits. Reasonable steps, as outlined in the plan, should be taken to revegetate the highwall benches. If the plan is followed and the benches do not have 70 percent of the premining vegetative ground cover or if it is impossible to measure vegetation cover, the Division can make a determination that revegetation has been accomplished within practical limits. For these reasons, the variance is not needed and the request needs to be removed from the plan. (PBB)*

*The same reasoning applies to the success standards for the pit floor where the operator has requested that the standard be lowered from achieving 70 percent of the premining cover to only needing 60 percent of the premining cover. If the*

*revegetation plan is followed and there is not enough vegetation cover, the Division can determine that revegetation has been accomplished within practical limits. This variance request should be removed from the plan. (PBB)*

*Please show this 12-acre area where soil won't be salvaged on a topographic map to scale with labeled elevations and contour intervals and provide information about the slope steepness. If topsoil is not to be salvaged from some areas, the plan needs to include a variance request giving justification for the variance and showing what alternate methods will be used. (PBB)*

All of the above information is either described in the February, 2006 NOI or is in this response. Lakeview's variance requests should be considered by the Division in accordance with these documents as set forth in the Rules.

*R647-4-113 – Surety*

*The surety amount determined includes the removal of any items listed in the variance section of this review, please include these items until a variance is approved. (BE)*

*Section 9.0 of the NOI references the Means Heavy Construction Cost Data manual was used and the references are shown in appendix D. That is not the case, there are no reference numbers associated with each reclamation activity. This information must be included. (BE)*

*Provide specific source information for all costs. (BE)*

*The surety must be based on reclaiming the highwall area to 45 degrees or less, since a variance has not been granted. (BE)*

*Operations:*

*Provide size and quantity of water tanks. (BE)*

*Provide information about existing roads such as: lengths, widths, overall road acres, and names if they exist. (BE)*

*Please provide detailed information of machinery and equipment used at the location. This information can be submitted in table form, include type, quantity, and size of each piece used. (BE)*

*Indicate portable toilet quantity, if any. (BE)*

*Provide costs to remove material piles. (BE)*

*Please identify the size ranges of the product. (BE)*

*Reclamation:*

*The surety amount of \$363,100.00 is currently inadequate based the submittal information. The Division has preliminarily determined that an additional \$108,218.00 is required. This estimate includes escalation, contingency of 10%, overhead & profit, and post mine monitoring. This amount may be adjusted once the plan is adequate and a specific surety determination is made. (BE)*

*Please provide a complete list of equipment and vehicles, and their application. (BE)*

*Justify the statement 'estimate 25 out of 56 acres for clean up'. How and what contributes to this estimate? Where is the amount of \$75/acre for trash removal obtained? There is no reference in the Cost Summary. The same applies to the loading/trucking. There is an estimate for number of trips, but the trash must be gathered and loaded on the equipment. There are no costs for that work including costs for workers to perform the loading work. In addition, there is no information about the vehicles used in the Cost Estimate. What is the quantity of trash (and your definition of trash)? There is no indication of dump fees. Generally speaking, these estimations are too vague. (BE)*

*In continuation of the above comment, the surety narrative includes cleaning and demolition within the trash category, so does the definition of trash consist of cleaning and demolition in addition to regular trash? (BE)*

*The building demolition lacks appropriate detail. What is the distance in miles to the disposal site? Where and how will the demolished materials be disposed of? What does the demolished debris consist of (metal, siding, gypsum etc)? What are the dump fees? What are the costs for gutting? If gutting isn't required, please specify. (BE)*

*Do the facilities have foundations? Information must be provided and made clear. If there are any foundations or concrete pads, a table must be provided with dimensions included thickness and volume. The costs should be determined that includes break-up the concrete and the disposal of it. (BE)*

*Does any of the portable equipment have concrete footers and/or slabs? (BE)*

*Are there fuel and/or oil tanks and maintenance area that requires removal? (BE)*

*There are water tanks, but there is no information regarding how the contents will be handled or where they will be emptied. (BE)*

*This information may be elsewhere in the review, costs are required to remove and dispose of power lines, poles and transformers. (BE)*

*Is there a lay-down area that requires removal and disposal of solid waste materials? (BE)*

*The costs associated with amending the soils are not included. (BE)*

*The Lakeview costs to relocate equipment do not specify distance traveled to relocation point. Please identify each cost: costs to load, cost of operator, cost of travel, cost of equipment etc. (BE)*

*The equipment list has no basis for \$2000/pc of equipment for mob/demob. What size crane and track hoe will be used? (BE)*

*What are the infrastructure removal costs? It is expected there are costs associated with the removal of generators, pumps, gates and signs etc. They must be listed and show costs. (BE)*

*There are no monitoring costs associated with revegetation and slopes. These costs must be included. (BE)*

*Provide dimensions of all bench surface areas. (for variance to leave highwall)  
BE*

*Escalation rate is 3.8% until April 2009. (BE)*

The Division misapprehends Rule R647-4-113.3, which places the responsibility for determining a surety amount on the Division "[a]s part of the review of the notice of intention . . . ."<sup>5</sup> By rule, the Division must establish an amount of surety that "will be based upon (a) the technical details of the approved mining and reclamation plan."

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<sup>5</sup> The entire paragraph reads as follows:

3. As part of the review of the notice of intention, the Division shall determine the final amount of surety required to reclaim the mine site. The surety amount will be based upon (a) the technical details of the approved mining and reclamation plan, (b) the proposed post mining land use, and (c) projected third party engineering and administrative costs to cover Division expenses incurred under a bond forfeiture circumstance. An operator's surety estimate will be accepted if it is accurate and verifiable. The Division may accept surety estimates based upon the Minerals

The Division assiduously reviewed the approved mining plan multiple times prior to its final approval, and accepted as adequate its technical details. To now require Lakeview to effectively rewrite these already approved details, without any showing by the Division that these new revisions are warranted, well beyond the requirements of the Rules and Utah law, and may derogate from the rights granted by law to Lakeview.

### **III. CONCLUSION**

Lakeview has submitted the above information and accompanying maps in good faith and in an effort to assist the Division with its ongoing review and regulation of the Lakeview pit. We look forward to continuing our cooperation with the Division as required by the Division and within the parameters set forth by rule and law. We recognize that you may have questions or comments about this response, and we will be happy to responding to any questions or comments you may have.

Sincerely,

**Lakeview Rock Products, Inc.**



John Burggraf, Vice President

Cc: Scott Hughes, Vice President  
Kevin R. Watkins, General Counsel

/KW